

TENNESSEE AIR POLLUTION CONTROL BOARD
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
NASHVILLE, TENNESSEE 37243-1531



Permit to Construct or Modify an Air Contaminant Source Issued Pursuant to Tennessee Air Quality Act

Date Issued:

Permit Number:

957082F

Date Expires: June 30, 2004

Issued To:

Bowater Newsprint Division

Installation Address:

5020 Highway 11 South
Calhoun

Installation Description:

Power Boilers F1, F2, F3
using coal, #6 fuel oil and natural gas
with incineration of HVLC and TRS gases in F2 and F3
boilers and multi-fuel boiler (emission source 41).
Modification: Pollution Control Project for NOx SIP call
to install low NOx burners on Power Boilers 2 (F2) and 3 (F3)
reducing NOx emissions and increasing CO emissions

Emission Source Reference No.

54-0012-10, 11, 12
PSD

The holder of this permit shall comply with the conditions contained in this permit as well as all applicable provisions of the Tennessee Air Pollution Control Regulations.

CONDITIONS:

1. The application that was utilized in the preparation of this permit is dated November 4, 2003, and signed by J. W. O'Grady, Director of Environmental Affairs for the permitted facility. If this person terminates his/her employment or is reassigned different duties such that he/she is no longer the responsible person to represent and bind the facility in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the Technical Secretary of the change. Said notification shall be in writing and submitted within thirty (30) days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the facility in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the facility until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

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DRAFT

TECHNICAL SECRETARY

No Authority is Granted by this Permit to Operate, Construct, or Maintain any Installation in Violation of any Law, Statute, Code, Ordinance, Rule, or Regulation of the State of Tennessee or any of its Political Subdivisions.

NON-TRANSFERABLE

POST AT INSTALLATION ADDRESS

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2. The maximum heat input capacity for this fuel burning installation shall not exceed 1,134,000,000 British Thermal Units per hour.
3. Particulate emissions from this fuel burning installation shall not exceed 0.176 pounds per million BTU of heat input, measured in accordance with EPA Method 5, as specified in 40 CFR 60 Appendix A.
4. Sulfur dioxide emissions from this fuel burning installation shall not exceed 4,293 pounds per hour, measured in accordance with EPA Method 6, as specified in 40 CFR 60, Appendix A.
5. By the provisions of the letter from Harold E. Hodges to R. C. McDonald dated September 2, 1983, the visible emissions from the common stack that serves this fuel burning installation shall not exhibit an opacity in excess of the limits specified in Rule 1200-3-5-.10 of the Regulations. Opacity data reduction shall be accomplished using the current EPA Method 9, as outlined in 40 CFR 60 Appendix A (i.e., 6 minute average opacity).

6. Operational Condition for Opacity Monitoring System

The use of Division approved continuous in-stack opacity monitoring is one of the methods by which this fuel burning installation demonstrates continual compliance with the applicable visible emission limitation. Therefore, for this fuel burning installation to demonstrate continual compliance with the applicable visible emission limitation, the in-stack opacity monitoring system shall be fully operational for at least ninety-five (95) percent of the time during each month of the calendar quarter. An operational availability of less than this amount may be considered the basis for declaring the installation to be in noncompliance with the applicable monitoring requirement, unless the reasons for the failure to maintain this level of operational availability are accepted by this Division as being legitimate malfunctions of the instruments. In the event of a disparity between the instrument's reading versus that of a qualified visible emission evaluator, the Technical Secretary may require the source to conduct any necessary testing or investigations needed to resolve the disparity.

7. Quality Assurance Condition for the Opacity Monitoring System

On-stack quality assurance audits shall be performed on the opacity monitoring system on a semiannual basis. The on-stack quality assurance audits shall be conducted in a manner prescribed by the Technical Secretary and written reports of the audits shall be submitted to the Technical Secretary as a part of the next quarterly excess emissions report.

Within ninety (90) days of each major modification or major repair of the opacity monitor, a repeat of the performance specification test shall be conducted and a written report of it submitted to the Technical Secretary as proof of the continuous operation of the opacity monitoring system within acceptable accuracy limits.

8. Data generated by the continuous in-stack opacity monitoring system shall be maintained for five years.
9. Consistent with the requirements of Chapter 1200-3-20 and Rule 1200-3-5-.02 of the Regulations, due allowance may be made for visible emissions in excess of those allowed in this permit which are necessary or unavoidable due to routine startup and shutdown conditions.

Routine startups as used above shall only cover startups which have less than 12 minutes of visible emission levels (based on six minute averaging intervals) in excess of the standard contained in Rule 1200-3-5-.10 of the Regulations. Routine shutdowns as used above shall only cover shutdowns which have less than 12 minutes of visible emissions levels (based on six minute averaging intervals) in excess of the

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standard contained in Rule 1200-3-5-.10 of the Regulations. A log of all malfunctions and non-routine startups and shutdowns shall be maintained in accordance with Rule 1200-3-20.04 of the Regulations. This exemption for routine startups and shutdowns shall not apply when an exceedance of the Tennessee ambient air quality standard for particulate matter for the twenty-four (24) hour averaging interval occurs in the vicinity of this facility.

10. Sulfur dioxide emitted from the incineration of High Volume Low Concentration (HVLC) Total Reduced Sulfur (TRS) gases from boilers F2 and F3 and the fluidized bed multi-fuel boiler No.1 shall not exceed a combined total of 91.5 pounds per hour.
11. A log of the hours of TRS incineration in boilers F2 or F3 and must be maintained at the source location and kept available for inspection by the Technical Secretary or his representative. This log must be retained for a period of not less than five years.
12. In the event there is a breakdown or shutdown of boilers F2 and F3 and the fluidized bed multi-fuel boiler No.1 for a period of greater than 2 hours that will prohibit the incineration of the total reduced sulfur gases, the kraft mill must begin shutdown within an additional two hour period.
13. TRS containing gases from the kraft mill shall not be burned in the boilers for more than 8,592 hours per year.
14. The exhaust gases from the power boilers combined stack shall be discharged vertically upwards into the ambient air from a stack with a maximum diameter of 10.25 feet at an exit point of not less than 211.5 feet above ground level.
15. The source owner or operator must install, maintain, operate, and submit reports of excess emissions from an in-stack total reduced sulfur emissions monitoring system to be located in representative areas of the effluent gas stream of the power boilers combined stack. The in-stack TRS monitor shall meet all the requirements specified in Performance Specification 5, as stated in the Federal Register, Volume 48, Number 140, Wednesday, July 20, 1983, and performance test data shall be submitted as proof of this.
16. The total reduced sulfur emissions from this fuel burning installation shall not exceed five (5) ppm by volume on a dry basis corrected to ten (10) percent oxygen on a twelve hour averaging basis. Compliance with this emission standard shall be determined through the use of continuous in-stack emission monitoring for total reduced sulfur compounds.
17. The use of an approved continuous in-stack total reduced sulfur emission monitoring system is the method by which this fuel burning installation demonstrates continual compliance with the applicable total reduced sulfur emissions limitation. Therefore, for this fuel burning installation to demonstrate continual compliance with the applicable total reduced sulfur emissions limitation, the in-stack total reduced sulfur emissions monitoring system shall be fully operational for at least ninety (90) percent of the operational time of the monitored unit during each calendar quarter. Unless the reasons for the failure to maintain this level of operational availability are accepted by the Technical Secretary as being legitimate malfunctions of the instruments, an operational availability of less than this amount may be considered the basis for declaring this fuel burning installation to be in noncompliance with the applicable monitoring requirements.
18. Quality assurance checks shall be performed on the in-stack total reduced sulfur emissions monitoring system on a calendar basis, and in a manner prescribed by the Technical Secretary. Written reports of the quality assurance checks shall be submitted in a format prescribed by the Technical Secretary. These quality

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assurance checks shall commence with the calendar year following initial monitor (conditions continued on next page) certification. Within ninety (90) days of each major modification or major repair of the in-stack total reduced sulfur emissions monitoring system, a repeat of the monitor performance test shall be conducted. A written report of the performance testing shall be submitted to the Technical Secretary as proof of the continuous operation of the monitoring system within acceptable accuracy limits.

19. NOx and VOC emissions, pursuant to 1200-3-6.03(2) of TAPCR, shall not exceed the following levels due to this modification:

Pollutant	NOx	VOC
Lbs/hr	728	6.23
Tons/yr	3189	27.3

20. Carbon monoxide (CO) emissions from this source were modeled to assess ambient impacts of increased collateral worst-case CO emissions as a result of installation of the low NOx burners (LNBs) pollution control project (PCP). The construction modification reduces NOx emissions significantly. Model-projected maximum hourly and 8-hour average impacts were well below the respective National Ambient Air Quality Standards (NAAQS) for CO. Hence, in accordance with the CO modeling demonstration, emissions from the modeled common power boilers exhaust stack shall be discharged unobstructed vertically upwards to the ambient air from a stack with an exit diameter of 10.23 feet (3.12 meters) not less than 211.47 feet (64.47 meters) above ground level.
21. The issuance of this construction permit supersedes any previously issued permit(s) for this air contaminant source.
22. The permittee shall revise their submitted Title V operating permit application within sixty (60) days of the issuance of this permit.

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23. The permittee shall certify the start-up date of modified Boilers No. F2 and No. F3 regulated by this permit by submitting

A COPY OF ALL PAGES OF THIS
PERMIT,

with the information required in A) and B) of this condition completed, to the Technical Secretary's representatives listed below:

A) DATE OF START-UP: _____ / _____ / _____
month day year

B) Anticipated operating rate: _____ percent of maximum rated capacity

For the purpose of complying with this condition, "start-up" of the air contaminant source shall be the date of the setting in operation of the source for the production of product for sale or use as raw materials or steam or heat production.

The undersigned represents that he/she has the full authority to represent and bind the permittee in environmental permitting affairs. The undersigned further represents that the above provided information is true to the best of his/her knowledge and belief.

Signature		Date
Signer's name (type or print)	Title	Phone (with area code)

Note: This certification is not an application for an operating permit. At a minimum, the appropriate application form(s) must be submitted requesting an operating permit. The application must be submitted in accordance with the requirements of this permit.

The completed certification shall be delivered to the Compliance Validation Program and the Environmental Assistance Center at the addresses listed below, no later than thirty (30) days after the air contaminant source is started-up.

Middle Tennessee Permit Program
Division of Air Pollution Control
9th Floor, L & C Annex
401 Church Street
Nashville, TN 37243-1531

Chattanooga Environmental Assist. Center
Division of Air Pollution Control
5430 McCallie Avenue
Suite 500
Chattanooga, TN 37402

(end of conditions)

The permit application gives the location of this source as 3908.134 Km. UTM Vertical and 703.834 Km. UTM Horizontal.